CREDIT APPROVAL PACKAGE (Initial Review)

November 2020
Line of Business: CB – Trading Products: Hedge Funds

Borrower:	Archegos Fund LP	**BMO Role:**	Bilateral
Connection:	Archegos Capital Mgmt. (Admin Connection)	**Risk Rating:**	(1) S-3
Industry:	Hedge Fund	**LGD:**	45%
CaR:	N/A	**Facilities:**	\$47.5MM Replacement Risk \$300MM DFT-GEL
Total Leverage:	N/A	**BMO Commitment:**	Uncommitted

Transaction Summary

Recommendation

Recommend approval of the following:

1. Industry: Hedge Fund
2. Outline of Request: Initial review of Archegos Fund LP ("AFLP"), a Delaware hedge fund that is managed by Archegos Capital Management LP ("Archegos") – a U.S. based investment manager. Archegos is the family office for Bill Hwang, previously the founder of Tiger Asia.
   a) Establish an S-3 risk rating in line with RRM. Establish an S-3 connection rating for administrative purposes only.
   b) Establish \$47.5MM of Replacement Risk limits to accommodate EQTRS trading. 14-Month tenor, within guideline as per DFT-Addendum. Further detail is in "Structure Overview" below.
   c) Establish \$300MM DFT- GEL during calibration period.
   d) Request approval to negotiate ISDA/CSA & MCA with Archegos Fund LP to support EQTRS trades. Further detail on proposed terms is in "Covenant & Trigger Analysis" section.
   e) Establish internal performance trigger of 1-month performance loss is greater than 15%. Further detail on the wider than normal performance trigger is discussed in the "Covenants & Trigger Analysis" section.
   f) Establish BMO Tier 3 HF Categorization for the purposes of IA & Haircut in line with updated HF FG.
   g) Next annual review date of November 30th, 2021.
   h) Approval recommended based on:
   - The fund is very sizeable relative to the limits requested. September 30th NAV was \$4.3Bn.
   - Activity will have a 1-day OET, such that BMO can terminate trades or increase margin overnight.
   - Initial margin levels are expected to range from 15%-20% such that almost all Replacement Risk is covered by IM.
   - As a family office, the fund's capital is more or less permanent. The fund is not legally obligated to meet investor redemptions and thus can weather significant drawdowns as well as performance volatility.
   - The fund is focused on mid to large cap global equities, with a favorable liquidity profile.
   - Since a settlement for insider trading in 2012, Archegos has since restructured and significantly enhanced both its operational & importantly compliance infrastructure. Additional due diligence was performed by BMO Compliance to confirm appropriateness of Archegos' controls & that Archegos is acceptable from a reputational risk point of view (discussed in further detail below.)
   - A more in-depth discussion of the strengths and weaknesses of the client & transaction is provided in the "Key Risks & Mitigants" section.
3. IIROC Classification: N/A for US funds.
4. Country of Risk: Archegos Fund LP is a Delaware Fund. Archegos Capital Management is based in New York. Country of Risk as U.S.
5. Syndication Strategy, if applicable: n/a
6. FG, HLE or other exceptions: None
7. Enterprise or P&C Matrix: Enterprise
8. Note to Deal Specialist (if any): APMS/DS team: SIC/ISC: 7299/151. Please assign connection and all related UENS to PM Joseph Boccuzzi. Resp code G3521. Adaptiv team: Connect to HF-Conn in Adaptiv.
9. Booking Location Explanation if non-standard for sector: BMO for FITRS & EQTRS. BCMC for repo.
10. Bank Leveraged Loan (Y/N): no

GOVERNMENT EXHIBIT 1004A
22 Cr. 240 (AKH)

11. Approval Routing:

Proposer	Recommender	Approver	Required Due To	Comments
J. Boccuzzi (5%)	S. Malkani (70%)	B. Sullivan (45%) E. Brundage (100%)	Exposure within Discretionary Limits Onboarding of fund with initial S-3 rating requires CE approval per HF FG.	

Fund	Domicile	Inception	Rating	NAV	Limits	% NAV	9/20 YTD Perf.	Products
Archegos Fund LP	Delaware	2001	S-3	$ 4,380	$ 47.5	1.1%	20.1%	EQTRS

Company Events & Initial Review Actions

- Archegos is a new relationship to the Bank, although has been a target prospect for a number of years. Since the LOB first launched this request, a number of initial vetting steps have already taken place. Archegos is a family office for Sung Kook "Bill" Hwang, formerly a PM at Tiger Capital, and later the founder & CIO of its separate spinout, Tiger Asia Partners. In 2009, while at Tiger Asia, charges were brought against the firm & Mr. Hwang in the U.S., Hong Kong, and Japan for insider trading & market manipulation. In 2012, [redacted] resulting in roughly $70MM in total fines and a 5-year industry ban in the United States and Hong Kong. In 2012-2013, Tiger Asia returned all external investor capital and converted to a family office.
- Due to this background, CB & LOB initiated additional due diligence in regards to potential reputational risk, similar to the process enacted for Point72. [redacted] support from various senior stakeholders in both the Business & Compliance was obtained. Business support was obtained from Deland Kamanga & Dan Barclay. BMO Compliance & AML (Mike Forlenza, David Moore, Andy Hoffman) had an additional due diligence call with Archegos' CCO (Michael Satine) on November 10th, 2020 to review the compliance controls in place at the firm. [redacted] Further background information is saved in the CAF.

Relationship Summary

David Matlow & David Amar in Equity Products are the primary LOB sales contacts. Jordan Lupu has also supported. Archegos is sizeable and relatively active in equity trading and has been a top 150 for the Bank for both cash trading & financing. The financing component via EQTRS will complement winning additional cash business. At full maturity of the relationship, the LOB is targeting a total GMV portfolio of up to $300MM, which would generate roughly $1MM of revenue on the financing side. If BMO is able to win significant cash trading business, this is expected to contribute another $1MM of annual revenue.

Structure Overview

Overview of Proposed Activity:

Archegos primary invests in equities, both long & short, but usually with a moderate long bias. They will sometimes hedge their portfolio with indices or ETF's. Although the fund has a global focus with large allocations to North America & Western Europe, it does have a sizeable exposure to major Asian markets such as China, Hong Kong, Japan, & South Korea. Often, they will access these markets via U.S. listed ADR's.

Initial analysis was performed on a series of "worst-case" portfolios which consisted of a portfolio where the client goes long 1-2 Chinese equity names at $100MM notional each (total portfolio of $200MM.) However, this represents a worst-case, based on initial inquiries from the client as to BMO's capacity. Per discussions with David Amar, both CB and LOB's preference is for a more diversified portfolio both in terms of individual issuers as well as geographic focus. The expectation is the gradual build-up of core positions in response to client flow & market conditions. The long-term strategy for this client is not to only accept the worst-case portfolio of concentrated China ADR's for an extended period, although BMO should be prepared for such a scenario temporarily & calibrate limits as such.

Initial Margin:

CB has communicated to LOB there is only a minimal appetite for uncollateralized replacement risk with this client. As a result, expected IM levels are expected to range between 15%-20% on this activity. IM improvements are expected to

be used as a lever to incentivize the client towards more hedged and diversified portfolios. For a more typically diversified long/short basket with greater allocation to developed market names, a more standard IM of 10% would be charged. MRO (Rich Taylor) has also reviewed initial sample trades & has agreed an elevated IM is appropriate as a potential mitigant to the more concentrated sample portfolios. Actual live DFT trades and IM level will be governed by standard oversight processes outlined in the DFT-Addendum.

Optional Early Termination: Although the swaps will have a 13-Month maturity, BMO will retain aggressive optional early termination rights in the MCA. CB recommends that BMO will be able to terminate or raise margin with no more than 1-days' notice, effectively providing an overnight swap facility to the client.

Bullet Swaps & Net Settlement: Activity is expected to be 13-Month bullet swaps. At swap maturity, Adaptiv methodology assumes a scenario in which BMO pays a swap settlement to the client, the client defaults, and BMO loses both the swap settlement payment & the variation margin posted to the client. This creates a spike in the PFE profile at trade maturity, effectively doubling the PFE. $47.5MM of limits are calibrated without this spike, as these swaps will be net settled. Ability to trade net-settled swaps with the associated exposure override in Adpativ is contingent on the full finalization and approval of the net-settlement process. In the interim, CB has no objection to moving forward if activity fits within the $47.5MM limit including the collateral spike. This would still allow the client to trade $40MM-$50MM notional of swaps in the interim.

Uncommitted Treasury Facilities:

- Recommended total limits to Archegos Fund LP are $47.5MM, 1.1% of the funds' $4.3Bn NAV. All limits are to support EQTRS activity with a 13-Month maturity. A 14-Month limit will be set in Adaptiv to accommodate the additional 2-week close out period added on by CCR methodology.
- An initial DFT-GEL of $300MM is recommended. Although initial aspirations are for $200MM in balances, a higher GEL is set to allow for more room if the client shows BMO as more diversified, higher geographic quality, or better long/short balanced portfolio.

Structural Considerations: No other structural considerations.

Risk Rating Rationale

CB recommends an S-3 rating for Archegos Fund LP, in line with RRM. Initially, an S-3 rating may seem conservative for a fund that is over $4.3Bn, even though RRM does not take the fund NAV into account explicitly. The rating is driven by the fund's significant performance volatility. Even though the fund has performed well (+8.65% annualized over the past 3 years,) the fund has had peak to trough drawdowns in excess of 60%. Somewhat characteristic of a family office, formal market risk management infrastructure is limited, as evidenced by the volatility of returns.

Although Archegos' credit profile is complex, CB feels the S-3 generated by RRM is appropriate. For example, while Bill Hwang's capital is a more stable capital base, lack of external investors has contributed to a more volatile return profile, weaker transparency, & fewer risk controls than a standard hedge fund. Although the fund is sizeable with the operational infrastructure & financing relationships to support that size, the reputational background of the insider trading settlement remains a weakness (although one that has been properly vetted by BMO internal process.)

It is within this broader context that CB recommends maintaining RRM's S-3 rating, even though Archegos may not, at first impression, be a typical S-3 rated hedge fund or carry an S-3 rating for the usual reasons. While CB has risk appetite to Archegos, it is only within the confines of certain parameters. The S-3 rating therefore properly reflects that Archegos, while creditworthy, presents additional risks and should be subject to the monitoring (namely being highlighted & reported on CB's quarterly update memo's to Credit) associated with S-3 names.

In line with the S-3 rating & CB's limited appetite for uncollateralized replacement risk, CB recommends Tier 3 HF categorization for IM & haircut.

Investment Advisor Summary: Archegos Capital Management LP

Bill Hwang began his career at Julian Robertson's Tiger Capital, eventually becoming a significant PM with an Asian equity portfolio. In 2001, Mr. Hwang spun out to found Tiger Asia. Tiger Asia grew to a $3Bn firm. In 2009, Tiger Asia & Bill Hwang were investigated by Hong Kong regulators, Japanese regulators, and the SEC for insider trading Bank of China, China Construction Bank, and Yahoo Japan. Tiger Asia was found to have improperly profited ~$5MM from its series of trades. Mr. Hwang & the firm [redacted] agreeing to total fines of ~$70MM and a 5-year industry ban in Hong Kong & the U.S. Tiger Asia returned all external capital & converted to a family office, renamed

Archegos Capital Management LP. Since 2013, the firm has been trading Bill Hwang's personal fortune which is almost entirely invested in the fund, at $4.38Bn as of 9/30/20.

Archegos has 52 employees located in New York City. The firm has about 32 investment professionals and 20 support professionals. As the firm only manages internal capital, it is not registered with the SEC. After the initial investigation into insider trading while at Tiger Asia, a significant portion of the management team was replaced. The most meaningful hires were Andrew Mills as the firm's Executive Chairman and co-CEO and Michael Satine as CCO. Andrew Mills has responsibility over the business side of Archegos in order to allow Mr. Hwang to focus solely on investing. Mr. Mills has veto power over Mr. Hwang & officially they each report to the other. Upon Mr. Hwang's incapacitation, Mr. Mills is authorized to manage the firm. Admittedly however, Archegos remains Mr. Hwang's firm and ultimately under his control. Prior to joining Archegos, Michael Satine was a senior compliance professional at Goldman Sachs for 30-years & also has veto power over investments if they pose a compliance risk.

Bios below:
<u>Bill Hwang | Founder and Co-Chief Executive Officer</u>
Bill is the founder and Co-Chief Executive Officer at Archegos Capital Management. Bill founded and ran Tiger Asia from 2001 to 2012, before turning the firm into a family office and renaming it Archegos Capital Management in 2013. Bill previously worked as an equity analyst at Tiger Management, as well as an institutional equity sales person at both Peregrine Securities and Hyundai Securities. Bill is also a co-founder of the Grace and Mercy Foundation that serves in the areas of Christianity, art, education, justice, and poverty. Bill received a BA in Economics/Business from the University of California, Los Angeles, and an MBA from Carnegie-Mellon University.

<u>Andy Mills | Executive Chairman and Co-Chief Executive Officer</u>
Andy is the Executive Chairman and Co-Chief Executive Officer at Archegos Capital Management, and joined the firm in 2014. He was the former Chief Executive Officer of the Thomson Financial and Professional Publishing unit of The Thomson Corporation, where he was also a member of the Board. Andy is also a Senior Fellow at The King's College in New York City, where he was previously the President and Chairman of the Board of Trustees. Andy received a BA from Oxford University and an MBA from Harvard University.

<u>Michael Satine | Chief Compliance Officer</u>
Michael is the Chief Compliance Officer at Archegos Capital Management, and joined the firm in 2010 after serving over 30 years in various senior compliance positions at Goldman Sachs. While at Goldman Sachs, Michael was a Vice President and Executive Director in the United States and London, and he was responsible for compliance programs. Michael received a BA in Economics from the City University of New York and an MBA and PMC from Iona College.

Business / Borrower Overview

Fund Summary
<u>Archegos Fund LP</u> is a Delaware fund, first formed in 2001 as Tiger Asia Fund LP. When the firm formally converted a family office, the fund was renamed to Archegos Fund LP in February 2013 and continued operations. As an entity to house Mr. Hwang's personal wealth, there are not the typical fund terms governing most hedge funds. There are no management or performance fees or formal redemption terms. If desired, Mr. Hwang can remove capital on a daily basis, although he has no material incentive to do so & keeps materially all of his net worth in the fund.

<u>3rd Party Providers:</u>
<u>Administrator:</u> Citco
<u>Auditor:</u> Kaufman Rossin
<u>Legal:</u> Ropes & Gray
<u>Custodian:</u> Bank of America
<u>PB's:</u> Morgan Stanley, Nomura, UBS, Credit Suisse, Deustche Bank (in transition to BNP Paribas,) Jefferies, Wells-Fargo.
<u>ISDA's:</u> 9 ISDA's, 6 of which are with the PB's, and 3 are ISDA-only swap counterparties. Wells is the only PB without an ISDA as they cannot cross margin between swaps and cash.

3rd parties are reputable including a significant set of major banking relationships. Use of an external administrator despite being a family office is a plus.

Investment Strategy

- Mr. Hwang makes all the firm's investment decisions and authorizes all the firm's trades. The strategy is long-short equity. The fund invests globally, although due to Mr. Hwang's background the fund tends to have a larger allocation to Asian markets than many long-short equity funds.
- He is supported by a team of roughly 25 research-dedicated professionals. The research team sources new ideas generating internal support documents for each idea, including a trading plan with entry and exit targets. Trade analysis is fundamental, underwriting each individual stock's value within the broader context of the firm's views on the macro environment. These are then formally presented to Bill Hwang & the firm's head of research, Christopher Burn who determine trade sizing.
- All trade ideas that are to be put in the portfolio are reviewed by Compliance.
- Instructions are then routed to the trading team, led by Head Trader William Tomita who is supported by a team of 4 execution traders. Mr. Tomita & team are responsible for accruing shares or disposing of shares at the price targets indicated by the investment team.
- The portfolio tends to be long biased, although there is a significant short portfolio. Trade horizon may be has long as 3-5 years for high conviction positions, although Archegos will trade out of positions sooner if price targets are met.
- The portfolio usually consists of ~150 names. Archegos will have a 10-20 core positions with the remaining positions being significantly smaller. They are usually included in the portfolio to increase attention and monitoring to the names. As conviction increases, these small positions will sometimes slowly graduate into larger size and core positions. However, the portfolio can still turnover quickly and in size if Mr. Hwang has a high conviction view or market volatility has increased.
- Although Mr. Hwang has a relatively concentrated portfolio, Archegos is not an activist investor. The investment strategy is more value & growth oriented.
- Further detail on current portfolio construction is discussed in "Historical Financial Analysis" section below.

Risk Management

- Scott Becker is the firm's Director of Risk Management. In terms of portfolio risk, Mr. Becker's role is more of a reporting capacity, ensuring the Mr. Hwang & the senior investment team are appraised daily of portfolio exposures & most importantly unencumbered cash. Mr. Becker is largely responsible for counterparty relations, including managing financing costs & margin with the PB's.
- As a family office, formal risk management infrastructure & use of formal limits is limited. Responsibility for the portfolio's risk ultimately lies with Bill Hwang as it is his capital to preserve & protect. Most risk discussions at the firm are focused on managing liquidity & financing.

<u>Liquidity:</u>

- Unencumbered cash is closely monitored. The firm targets a 30% unencumbered cash floor. Most of this is held as excess margin with PB's and financing counterparties, although some additional buffer is swept back to the custodian, BofA.
- Archegos has fully duplicated the margin methodologies of its PB's. At close of business each day, all margin balances, including potential margin calls are calculated before the next day's trading. Margin is also closely considered when allocating the portfolio amongst financing counterparties, and actively optimized.
- Per Mr. Becker, the lowest unencumbered cash level experienced by the fund in March was 24%, which was soon cured back to 30%. This is despite a 45.9% loss that month. In order to maintain their unencumbered cash floor, the fund actively reduced exposure. Per Mr. Becker, Archegos did not miss or materially dispute any margin calls in March. Margin calls are managed by Mr. Becker in conjunction with the operations team.
- The fund tends to focus on larger-cap equities in actively traded, major markets. Assuming they can trade 10% of 90-day ADV, they can unwind the portfolio in under 2-weeks. Position liquidity is also considered relative to unencumbered cash, such that the fund is confident they can reduce exposure if needed to ensure they meet their 30% cash target.

<u>Leverage:</u>

- There are no formal limits on leverage. Since the firm's inception, the fund has run at 275% GMV. The fund usually carries a significant long bias even though the short book is sizeable. Since inception LMV has average 175%, SMV 100%, with a NMV of about 75% net long.
- At the time of the due diligence, GMV had increased to ~650%. LMV was 465% and SMV was 185%, for a NMV of 280%. This is amongst the highest levels Archegos has used historically. The increase in leverage has been driven by maintaining high conviction trades that have substantially gained in value, in addition to a larger short portfolio with a greater allocation of index hedges to help offset some of this increased long exposure. In addition, Archegos find the current market environment attractive & has been actively putting on positions.

Funding:

- Archegos has a sizeable suite of financing counterparties, including 7 cash Prime Brokers, and 3 ISDA-only counterparties. The portfolio is almost exclusively financed using PB or equity-TRS financing. All of the PB facilities are overnight, without any lockups.
- Morgan Stanley, Nomura, UBS, and Credit Suisse are the largest PB's, each with 15%-25% of the portfolio. The next tier is Deutsche/BNP and Jefferies who each have 5%-10% of the portfolio. Each swap counterparty has a comparatively small allocation, usually <2% of the portfolio.
- Archegos receives portfolio margin at the PB's. ISDA-Only swap counterparties charge IM trade by trade. The average margin on the portfolio is 11.5% of GMV. Given the focus on unencumbered cash and margin, Archegos puts a premium on IA predictability. Optimizing the portfolio rules at their cash-PB's can be operationally intensive. Thus, for certain subsets of their portfolio, Archegos puts a premium on locating financing counterparties where a flat margin is charged, hence their interest in adding BMO as an additional swap counterparty.
- Furthermore, Lehman Brothers was a major prime broker for Archegos. Archegos had significant exposure to Lehman's bankruptcy which was an operational strain for the firm. Since, Archegos has focused very closely on diversifying their counterparties to avoid similar concentration and exposure to a single bank. This is another driver for adding BMO to their already sizeable roster of counterparties.
- Per Mr. Becker, during March 2020, the firm did not experience any margin increases or pullback of financing from their providers. Although the fund breached its NAV triggers in their ISDA's, all counterparties waived the breaches. Mr. Becker received regular call from their banks for updates, but ultimately Archegos was able to maintain all of their financing terms even during March's drawdown.
- A focus of the due diligence was how other banks remained comfortable with Archegos despite these losses and trigger breaches. Although Mr. Becker did not have specifics, CB expects the following was important:
    - Although as industry practice overnight Prime Brokerage or swaps often require credit limits, many other banks measure their risk net of initial margin. IM levels for equity PB or swaps often cover most PFE risk and often a significant portion of stress risk. As a result, risk to Archegos may have been measured as very small at competitors. For a client of Archegos' size, who was continuing to meet margin calls without event, where activity was overnight, and the risk net of IM was considered small, it is credible that many competitors did not see a need to take action despite the 20% loss in February and 45% loss in March.

Valuation:

- Citco is the firm's administrator and also serves as the fund's official books and records. Archegos almost exclusively trades publicly listed equities which are fairly straightforward to value. Citco independently strikes the fund's NAV each month.
- There were no Level 3 assets in the 2019 audit from Kaufman Rossin which received an unqualified opinion.

Compliance:

- The compliance team strives to operate as if Archegos was still a registered IM with external investors. Compliance screens the firm's investment research sources to ensure than MNPI is not utilized. Using a centralized vendor system, the compliance team reviews all of the firm's trades. Employee personal trading is also monitored. A restricted list for both firm and personal trading is maintained and circulated. Compliance also examines the firm's research views with actual trading activity to identify outliers or inconsistent activity that may indicate MNPI.
- All employees receive compliance training at least annually, conducted by the firm's legal counsel Ropes & Gray. All employees must read the firm's compliance manual and sign a formal code of ethics. ACA is also kept on retainer.

The fund and Mr. Hwang have a large appetite for risk. The fund's historical leverage levels are reasonable for a long/short equity strategy, although still significant for a concentrated portfolio often focused on high beta names. Current leverage is at a high level, although this is partially due to increased focused on index hedging. Risk management is not a strength of the fund's credit profile. Yet, there are a number of mitigating factors that at least partially offset some of these weaknesses. The firm does take appropriate steps to manage its return volatility.

The focus on a highly liquid portfolio and sufficient levels of unencumbered cash is a significant positive. CB gains considerable comfort that even during the severity of March 2020's downturn, Archegos was able to meet all of its margin calls without delay due to their emphasis on liquidity management. Archegos is able to maintain a large roster of highly reputable global banks as financing partners. Further, the fund is able to weather significant levels of volatility because there is no redemption pressure or benchmarks to meet for external investors. Risk management is, to a degree, embedded in the investment process which underwrites the value of each equity security. Thus, Mr. Hwang often views markdowns on the portfolio as "mark-to-market" if the fundamental potential of a company remains intact.

To this end, Mr. Hwang has a strong incentive to make risk-aware & ultimately valuable investments as it is his personal money at risk. Mr. Hwang has had a proven ability to select valuable companies over his 20-year investment career.

While there is little in terms of formal limits, the portfolio is not particularly complex. Sophisticated modeling techniques would not necessarily improve the fund's ability to manage risk as compared to more fundamental factors such as concentration or leverage limits (which, though, are admittedly are not employed either.) Operationally, although there is reliance on 3rd parties, Archegos has sufficient staff and infrastructure for a firm with their size and trading volume. Retaining Citco as an Administrator remains a positive, and the portfolio is relatively straightforward to value. Given the major business and personal impact of Archegos' prior compliance failings which led to $5MM in improper trading gains, compliance infrastructure has improved as vetted by BMO's internal subject matter experts.

Performance

	Archegos Fund LP	Credit Suisse Long/Short Equity Hedge Fund Index
Sep 2020 YTD	20.13%	0.20%
2019	63.73%	12.17%
2018	-36.01%	-4.62%
Average Annual Return*	8.65%	3.45%
Annual Standard Deviation*	68.02%	8.08%
Sharpe Ratio*	0.438	0.285

*36 month calculation

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2017 Perf.	15.1%	2.3%	2.9%	-1.6%	1.9%	-11.1%	22.6%	2.1%	0.1%	6.9%	-3.8%	-0.9%	**37.9%**
2018 Perf.	18.8%	2.2%	-5.4%	4.0%	14.9%	2.5%	3.6%	4.2%	-5.2%	-31.7%	-11.1%	-26.8%	-36.0%
2019 Perf.	52.7%	6.8%	4.3%	2.0%	-19.1%	7.8%	0.3%	-4.6%	-11.7%	6.0%	18.8%	1.7%	**63.7%**
2020 Perf.	-1.2%	-20.9%	-45.9%	34.0%	12.9%	56.7%	23.0%	-7.8%	5.7%				**20.1%**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017 NAV	2,340	2,399	2,085	2,045	2,093	1,818	3,530	3,456	3,454	3,738	3,442	3,204
2018 NAV	3,959	4,065	3,691	3,872	4,560	4,697	4,897	5,133	4,825	3,066	2,729	1,981
2019 NAV	3,287	3,545	3,704	3,791	2,960	3,231	3,247	3,063	2,650	2,841	3,472	3,506
2020 NAV	3,463	2,739	1,480	1,984	2,241	3,513	4,525	4,100	4,380			

The fund's performance is extremely volatile. As a result, typical comparison to hedge fund indices is not necessarily informative. Since 2017, the fund has had two drawdowns in excess of 60%, the first occurring in Q4 2018 & more recently in Q1 2020. Despite this, the fund has been considerably profitable over the longer run. Since January 2017, the fund has generated over $1.2Bn in PnL.

Mr. Becker attributed the fund's volatility to the long bias, significant use of leverage, and focus on high conviction names. Mr. Becker stressed that Mr. Hwang's trading horizon is long-term and he is willing to accept sizeable mark-to-market losses provided the trade fundamentals remain intact. The firm is cognizant they can only enjoy this long-term trade horizon as long as they can maintain their leverage and financing – thus their focus on trading liquid names and maintaining adequate levels of unencumbered cash.

Q1 2020 losses were driven by the fund's investment in financials which were ~75% of NAV going into 2020. Although many of the firm's technology names – such as Amazon, Netflix, Apple, Facebook – held up well, many Chinese technology names had ~10-20% drawdowns. In the subsequent summer months of 2020, the fund's largest U.S. technology names increased in value considerably. As these names appreciated, capital was recycled into Chinese technology names which were still trading at an attractive discount. This part of the portfolio then continued rebounded in line with the overall market recovery, yielding a 20% YTD return for the fund.

Capital / Investor Base

All of the capital is Bill Hwang's and his various family trusts. Although Mr. Hwang has the ability to withdraw capital from the fund, he has not done so historically and keeps materially all of his net worth in the fund. Mr. Hwang will withdraw capital to pay taxes and the firm's staff including annual bonuses. Although Archegos has been allowed to

raise external capital since 2017, there is no intention to raise outside investor money at this time. Archegos prefers the flexibility of operating as a family office and is comfortable with its size/AUM.

Due Diligence / Reporting

Joe Boccuzzi from Corporate Banking had a due diligence call with Scott Becker, Director of Risk Management, on October 28th, 2020. Mr. Becker was open and responsive to CB. Mike Forlenza, David Moore, & Andy Hoffman from BMO had an additional due diligence all with Archegos' CCO Michael Satine, his deputy Fernanda Piedra, and Scott Becker on November 10th, 2020. The line of business (David Amar, Jay Epstein) and Corporate Banking (Joe Boccuzzi) were also included on the call. The additional due diligence call covered Archegos' compliance infrastructure.

Archegos' disclosure has been adequate. Archegos' senior staff have been responsive and cooperative. Written disclosure is limited, however, as the firm does not have outside investors with the usual reports that are generated for investors. Written disclosure will be limited to monthly NAV & performance, although the manager remains accessible for discussions whenever needed. Emphasizing the level of detail provided to not only CB, but BMO's Compliance team on the due diligence calls, the level of disclosure from Archegos is ultimately adequate.

Industry Overview

Hedge Fund industry is $3.12 trillion in AUM (per HFR Global Hedge Fund Industry Report). Strategies include macro or global directional, market neutral or arbitrage, event driven, regional strategies (i.e. Emerging Markets), sector strategies (i.e. Managed Futures), and multi-strategy.

Key Risks & Mitigating Factors

Risk	Mitigants
Quality of Fund Manager	• Archegos' prior insider trading settlement is a reputational concern & elevated risk. As a result, additional due diligence was performed by BMO Compliance to ensure that Archegos has improved its internal controls since the initial finding. The output of that process was that Archegos' controls are sufficient and the firm is acceptable or onboarding from a reputational risk perspective. • Despite this background, the firm has demonstrated trading expertise and Bill Hwang has a successful 20-year track record trading the markets in which Archegos is active. Bill Hwang's acumen has allowed him to amass over $4Bn in net worth, almost all of which is invested in the fund. • Despite being a family office, Archegos has a sizeable staff of over 50 people, with appropriate compliance & operations resources.
Strategy Concentration & Performance Volatility	• The strategy is concentrated in high conviction positions and uses a significant amount of leverage. Although the fund may and has invested globally, it currently has a higher allocation to Asian markets including China. • Offsetting this is a focus on liquid, actively traded names. Even during March 2020's market volatility, the firm was able to reduce exposure to raise liquidity and meet all their margin calls. Even with the sizeable drawdowns, the fund's NAV did not drop below $1.4Bn.
Portfolio Liquidity & Funding	• Although risk management is limited as compared to a typical hedge fund, one strength of the firm is the focus on liquidity and funding. The 30% unencumbered cash floor is an appropriate level for the strategy, and was able to be maintained during March 2020. The firm trades in liquid names, albeit often in emerging markets, but can unwind the portfolio in under 2-weeks conservatively assuming 10% ADV. The fund takes sizeable positions but is not an activist, often focusing on mid to large cap issuers. • Archegos has funding relationships with most major global banks. Even during March 2020's drawdown, Archegos did not experience any changes in their financing terms with counterparties across the

	Street.
Capital Adequacy to Sustain Large Losses	• The fund is sizeable, among one of the larger individual funds industry-wide at \$4.3Bn. Even during March 2020's drawdown, the fund's NAV remained above \$1.4Bn. • Proposed activity is to be short-term. Although the swaps will be 13-Month bullets, a daily OET giving BMO the opportunity to terminate trades or raise margin is proposed. • IM levels to be charged that cover materially all of BMO's replacement risk, although CB acknowledges stress-risk may remain. In order to incentivize a more diversified, less biased, and less volatile portfolio, a lower IM can be offered to encourage stronger portfolios. • Transactions are subject to daily MTM and margining provisions. Haircuts apply at BMO Tier 3. • Even though a daily OET would allow daily termination, BMO still proposes standard ISDA/ATE's: 1) NAV Triggers: performance return decline 20% mo/mo rolling, 30% 3mo/3mo rolling, and 40% 12mo/12mo rolling; 2) NAV Floor: 50% decline since last audited financial statement. • Internal Trigger: 1-month performance losses > 15%
COVID-19	• Like most hedge funds, Archegos was affected by COVID-19 in 2 main ways. First, they had to enact BCP procedures and work remotely. This was enacted without major incident, and some select personnel have returned to the firm's New York City office. • The fund experienced extreme volatility in March 2020, although admittedly during among the worst market moves in history. Despite a 45.9% loss in March, the firm was able meet all of its obligations to counterparties without issue. In this regard, the firm's focus on a liquid portfolio and maintaining sufficient unencumbered cash was critical. While a drawdown of this magnitude would have posed an existential risk for a standard hedge fund, the fact Archegos is a family office with a long-term trading horizon without redemption pressure allowed the fund to recover +20% 2020 YTD return, including significant profitability since 2017.

Transaction Rationale Summary

In line with its S-3 rating, Archegos Fund LP presents a number of elevated risks. The interplay of the firm's historical insider trading settlement, family office structure, very high performance volatility, material use of leverage, geographic focus, and potentially concentrated portfolio require special consideration. Yet, the firm exhibits a number of strengths that also must be acknowledged, including a very sizeable NAV, a long track record and proven expertise of its principal, acceptable levels of infrastructure, as well as its strong & diverse set of counterparty relationships.

CB's view is that the risk appetite to an acceptably reputable \$4.3Bn fund with a strategy that has had a successful (albeit volatile) 20-year track record should be non-zero to support a potential \$2MM/year revenue opportunity. To mitigate the elevated risks presented by Archegos, sizing and structuring becomes more important.

- CB recommends only small limits relative to the fund's current NAV as well as the fund's lowest NAV experienced during March 2020. Even at March 2020's low NAV of \$1.48Bn, \$50MM limits are <3% of NAV.
- CB only recommends activity with 1-day OET where BMO can terminate or raise margin with 1-days' notice.
- CB recommends initial margin levels such that materially all replacement risk is covered by IM (15%-20% for sample portfolios provided.)
- Only positions & sizing that can be readily liquidated to be financed.
- Net settlement procedures are only employed after appropriate procedures and controls are approved by relevant BMO stakeholders.

If these conditions are met, CB feels that the proposed activity is both soundly structured and appropriately sized to an ultimately creditworthy, albeit riskier, counterparty. Although BMO's risk appetite should not necessarily follow that of competitors, CB recommends structural protections that are consistent with commercial industry practice in approaching this activity & believes has kept a large number of reputable banks comfortable with Archegos. The margin of safety is significant. Even at March 2020's NAV $1.48Bn, the fund would still be a sizeable fund in the industry overall, and without the potential pressure of investor redemptions. Activity would still be sized appropriately small and after initial margin, uncollateralized PFE risk would be de-minimis.

Source of Repayment

- Primary: hedge fund's operating cash flow
- Secondary: collateral embedded in the trade; daily MTM with $0 threshold and $250K MTA.

Historical Financial Analysis

September 2020 – based on due diligence call

- The fund's NAV was $4.38Bn as of September 2020 month-end., up from $3.5Bn FYE2019. YTD performance was +20.1%.
- Long exposure was 465%, short exposure was 185% measured at notional. All positions were cash equities or equity swaps.
- The long portfolio consisted of 115 names, 25 of which were above 2% of NAV. The short portfolio is composed of two components: (i) alpha shorts (ii) hedges. The alpha short portfolio had 40 names, 22 of which were over 2% of NAV. The hedge portfolio is mainly constructed using ETF's such as SPY, EEM, and FXI.
- The top 10 longs were 350% of NAV.
- Per Mr. Becker, due to the dramatic increase in equity prices during the Q2-Q3 2020, the geographic focus of the portfolio had shifted somewhat. Earlier in the year, the fund's largest positions were major U.S. tech names such as Microsoft, Apple, Amazon, Facebook, Netflix, and Tesla (TSLA short.) The fund began taking profits on these names throughout Q3, partially recycling capital into some Chinese ADR's. The three main themes in the portfolio remain the above U.S. technology stocks, Chinese technology names (Alibaba and Baidu are major positions,) as well a U.S. financials.
- Unencumbered cash was 30% of NAV, at target. This was down from 42% in the summer when the firm was still more cautious redeploying risk. Margin with counterparties averaged 11.5% of GMV.

Audited financials, December 31, 2019

- The audits are fairly detailed in terms of the funds' positioning, as it is mostly long/short global equities and swaps (reported at notional values in additional fair value.) Other than the repositioning described by Mr. Becker above, he also indicated the audits present a fair representation of the fund's major exposures and trading patterns, again highlighting that the trade horizon tends to be long-term. A summary of the fund's largest positions, geographic, and sector exposures as of year-end are below. Figures are expressed as a % of NAV, and ADR's as the home-country of the issuer.

Country	Long	Short
U.S.	255.4%	177.0%
China	118.3%	21.1%
South Korea	0.6%	41.7%
Japan	4.5%	26.2%
Germany	5.4%	
U.K.	1.9%	
Netherlands	0.2%	
Spain		0.1%
Sweden		0.1%
Italy	0.0%	
Australia	0.0%	
Total	**386.4%**	**266.1%**

Sector	Long	Short
Internet, Media, & Telecom	267.0%	15.2%
Financial	74.0%	43.7%
Index		114.1%
Retail	24.0%	58.0%
Info. Technology	18.4%	4.5%
Automotive	0.1%	19.3%
Pharmaceuticals		7.3%
Consumer Staples	0.0%	2.0%
Health Care		1.9%
ETF	1.0%	
Real Estate	0.7%	
Transportation	0.6%	
Professional Services	0.2%	
Airline	0.2%	
Portfolio Swap	0.1%	

Issuer	Long	Short
Other	55.4%	112.7%
SPY		114.1%
Amazon	66.2%	
Alibaba	37.9%	
Baidu	29.2%	
Netflix	26.9%	
Fiserve Inc.	26.3%	
IQIYI Inc.	25.7%	
Apple	23.4%	
Fast Retailing		19.9%
Tesla		19.3%
Microsoft	18.2%	
Facebook	14.0%	
Vipshop Holdings	12.2%	
Alphabet - A	11.7%	

Lodging	0.0%	
Total	**386.4%**	**266.1%**

Alphabet - C	10.0%	
Lendingclub	10.4%	
Schwab	8.2%	
Blackstone	5.3%	
Deutsche Bank	5.2%	
Total	**386.4%**	**266.1%**

- NAV at FYE was $3.5Bn. Net income was $1.63Bn. Net redemptions were $102.6MM.
- Total assets were $13.19Bn, for an assets/NAV of 3.76x.
- 79.5% of assets were Level 1, 20.5% were Level 2, no Level 3 assets.
- Cash and cash equivalents were $1.Bn, 28.5% of NAV. This does not include excess borrowing power.
- Derivatives were mainly equity swaps, with some FX forwards for currency hedging. Equity swap notionals were approximately $1.9Bn by $8Bn short. Swaps are mostly used for the short portfolio due to operational ease.

Interest Rate Risk and Balance Sheet Considerations

The fund's investment portfolios consist entirely of equities with limited interest rate risk. FX is only used to hedge non-USD exposure.

Projected Financial Analysis

N/A. Hedge funds' strategies and investment allocation change frequently. Each trade is collateralized and is subject to daily MTM and margining provisions.

Covenant & Trigger Analysis

Proposed ISDA Terms:

1) Termination or material amendment to key docs
2) Change/removal of investment manager
3) Cross-acceleration with operational carve out with 1 LBD cure.
4) >20% mo/mo (all-inclusive), >30% 3mo/3mo (all-inclusive), >40% 12mo/12mo (all-inclusive); NAV floor of 50% of previous FYE.
5) Key person both Bill Hwang & Andrew Mills
    - Archegos has requested no key-man clause as they are sensitive to the entire portfolio being liquidated if Bill Hwang is incapacitated. CB is comfortable that under the direction of Mr. Mills, who as co-CEO and Executive Chairman is properly authorized, there are additional resources at the firm to manage an orderly unwind of the fund: specifically the head of research Christopher Burn and head trader William Tomita. As such, CB proposes a key man to also include Mr. Mills as a potential way to get Archegos comfortable with a more stable key man clause. CB notes that the 1-day OET will still allow BMO the flexibility to terminate or increase margin within 1-days' notice as BAU.

While these are initially proposed terms, given Archegos' size and that many ISDA's were possibly grandfathered from Tiger Asia, CB is expecting additional asks from Archegos. CB will continue to be in close contact with Credit as terms evolve.

Internal Triggers: Fund's 1-month performance losses >15%.

- Although it may seem counterintuitive to widen the performance trigger for an S-3 fund, CB seeks a balance between meaningful monitoring & efficient workflow. The fund's volatility profile has been discussed above and it is expected that 10% losses will occur. Given the fund is internal capital only, a 10% loss is not necessarily an indicator of future redemptions or fund stress. Therefore, a somewhat wider internal trigger is proposed in order to properly capture meaningful large losses that would signal material deterioration of the fund.

Collateral Analysis & LGD

Daily MTM and Initial Margin received under CSA with $250k MTA. Cash or UST's as acceptable collateral.

APPENDICES

Appendix I: Legal Organization Structure

Archegos Fund LP is a standalone Delaware LP. All of its capital comes from Bill Hwang directly, or via various family trusts & his charitable foundation, the Grace & Mercy Foundation. Archegos Capital Management LP is the fund's investment manager, and only manages this fund in addition to some small charitable trusts for Mr. Hwang. The firm's 50 or so employees are hired by Archegos Capital Management in its capacity as an investment manager. The general partner is wholly owned by Mr. Hwang.

Appendix II: Corporate Governance

Mr. Hwang ultimately controls the fund through his ownership of the general partner, the investment manager, and only shareholder in the fund. Both Mr. Hwang and Andrew Mills serve as co-CEO's and formally report to each other. In the event of Mr. Hwang's incapacitation, his family members (mainly his children) & the board of his charitable foundation (Grace & Mercy Foundation) which includes Mr. Mills, will have control over his assets. Mr. Mills would retain control over the investment manager and fund operations in his role as co-CEO.

After the insider trading settlement, Archegos' management team was largely replaced. The fund is audited by Kaufman Rossin and retains an external administrator Citco. Archegos governance practices around compliance have been reviewed by BMO Compliance. Despite the clear reliance on Mr. Hwang's discretion, there are reasonable controls and governance in procedures in place considering the firm is a family office.

Appendix III: LTS & Other Regulatory Items (if applicable)

- FDIC Leverage: n/a
- ERI Code: 0
- Req W: n/a
- Req O: n/a

Appendix IV: Financing Guideline Information

Subject to the Hedge Fund Financing Guideline, Trading Products Financing Guideline, Securities Finance Transaction Financing Guidelines, DFT Addendum.

Appendix V: EBITDA Reconciliation

n/a

Appendix VI: Bank Leverage (if applicable)

n/a

Appendix VII: Enterprise Value Support (if applicable)

n/a

Appendix VIII: Sponsor Overview (if applicable)

n/a

Guarantor Analysis

N/A